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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,039	01/12/2001	Joseph Rinchiuso	CE08395R	1866

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EXAMINER	
HAILE, FEBEN	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
09/27/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/760,039	RINCHIUSO ET AL.	
	Examiner	Art Unit	
	Feben M. Haile	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *10-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 13-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In view of amendment filed June 27, 2007, the status of the application is still pending with respect to claims 1-14, with claims 10-12 being withdrawn from consideration due to restrictive non-election.

2. The amendment filed is sufficient to overcome the rejection of claims 1-9 and 13-14 based upon the references Koo et al. (US 6,804,219) and Kim et al. (US 6,947,397) failing to disclose each an every limitation of the claims, specifically the limitation delaying dropping the data channel for a time period based on the data rate. However, upon further consideration, a new ground(s) of rejection is made in view of Hjelm et al. (US 6,529,497).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al. (US 6,804,219), hereinafter referred to as Koo, in view of Hjelm et al. (US 6,529,497), hereinafter referred to as Hjelm.

Regarding claims 1 and 7, Koo discloses transmitting data over a wireless data channel at a data rate **(figure 2 unit 200; column 2 line 38; in an active state, data is transmitted on a dedicated traffic channel at a rate)**; determining that no more data needs to be transmitted **(column 2 lines 43-46; data transmission is discontinued)**.

Koo fails to explicitly suggest delaying dropping the data channel for a time period based on the data rate.

Hjelm teaches a method for a packet data service that releases a channel by starting a timer when there is no more traffic ongoing on a channel, i.e. data rate=0, and then releasing that channel when the timer expires.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method for releasing a channel taught by Hjelm into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

Regarding claim 2, Koo discloses the step of transmitting data over the wireless data channel comprises the step of transmitting data over a Code Division Multiple Access (CDMA) Supplemental Channel **(column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a supplemental channel)**.

Regarding claim 3, Koo discloses if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered **(column 2 lines 43-46)**.

Koo fails to explicitly suggest wherein the step of delaying dropping the data channel for a time period based on the data rate comprises the step of delaying dropping the data channel for a time period, wherein the time period is proportional to the data rate.

Hjelm teaches a method for a packet data service that releases a channel by starting a timer when there is no more traffic ongoing on a channel, i.e. data rate=0, and then releasing that channel when the timer expires.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method for releasing a channel taught by Hjelm into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

Regarding claim 4, Koo discloses operating a data transmitter in a CDMA Active state **(figure 2 unit 200; column 2 line 38; in an active state, data is transmitted on a dedicated traffic channel at a rate**; determining that no more data needs to be transmitted over a CDMA supplemental channel **(column 2 lines 43-46; data transmission is discontinued)**; and operating the data transmitter in a Control Hold

state **(column 2 lines 43-46; the dedicated traffic channel is released and a control hold state is entered)**.

Koo fails to explicitly suggest prior to delaying transition to the Control Hold state for a period of time, wherein the period of time is based on a data rate.

Hjelm teaches a method for a packet data service that releases a channel by starting a timer when there is no more traffic ongoing on a channel, i.e. data rate=0, and then releasing that channel when the timer expires.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method for releasing a channel taught by Hjelm into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

Regarding claim 5, Koo discloses wherein the step of operating the data transmitter in the CDMA Active state comprises the step of transmitting via a dedicated control channel and a CDMA supplemental channel **(column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a dedicated control channel or a supplemental channel)**.

Regarding claim 6, Koo discloses wherein the step of operating the data transmitter in the CDMA Control Hold state comprises the step of transmitting via a dedicated control channel only **(column 1 lines 49-54; communication between a**

base station and mobile station use dedicated channels such as a dedicated control channel).

Regarding claim 8, Koo discloses if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered **(column 2 lines 43-46)**.

Koo fails to explicitly suggest wherein the period of time is proportional to the data rate.

Hjelm teaches a method for a packet data service that releases a channel by starting a timer when there is no more traffic ongoing on a channel, i.e. data rate=0, and then releasing that channel when the timer expires.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method for releasing a channel taught by Hjelm into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

Regarding claim 9, Koo discloses wherein the channel circuitry comprises CDMA fundamental channel circuitry **(column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a fundamental channel)**.

4. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al. (US 6,804,219), hereinafter referred to as Koo Hjelm et al. (US 6,529,497),

hereinafter referred to as Hjelm, in view of Lohtia et al. (US 2002/0082033), hereinafter referred to as Lohtia.

Regarding claims 13-14, Koo as modified by Hjelm discloses the limitations of base claim 1 and 7.

Koo, Hjelm and/or their combination fail to suggest establishing a temporary block flow (TBF) between a transmitting device and a receiving device to transmit data over the wireless data channel; and delaying termination of the TBF by transmitting dummy data over the wireless data channel

Lohtia discloses a method for establishing a temporary block flow (TBF) between a mobile station and base station for signaling purposes **(page 2 paragraph 0024)**. Lohtia further teaches that the base station and mobile station send messages to each other when the end of a TBF is detected before releasing the TBF **(page 3 paragraph 0028-0029)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of Lohtia into the state transition method disclosed by Koo as modified by the method for releasing a channel taught by Hjelm. The motivation being enhancing performance of bursty packet based communications over a wireless network.

Response to Arguments

5. Applicant's arguments filed June 27, 2007, with respect to the rejection(s) of claim(s) 1-9 and have been fully considered and are persuasive. Therefore, the

rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hjelm et al. (US 6,529,497).

6. Applicant's arguments filed June 27, 2007, with respect to the rejection of claim(s) 13-14 have been fully considered but they are not persuasive.

The Applicant respectfully traverses that Lohtia does not suggest delaying TBF termination by transmitting dummy data. The Examiner respectfully disagrees. Lohtia teaches the exchange of a control message including a parameter having the value zero indicating there is no more data to send before releasing a TBF. At the time the invention was made, it would have been obvious to one of ordinary skill in the art that the control message could be equivalent to dummy data because it does not have actual information that the devices were trying to exchange. Therefore as the claims are interpreted in their broadest sense, the Examiner believes that Lohtia indeed does render the Applicant's invention obvious.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/13/2007

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